

Docket No.: 123029-1057 (UHID 2003-031)

Patent

In The United States Patent And Trademark Office

In re Application of: Xiaolian Gao et al.

Serial No.: 10/553,328

Filing Date: Unassigned

Priority Date: April 14, 2003

Examiner: Unknown

Group No.: 1623

Confirmation No.: Not Assigned

For: Novel Reagent Compounds and Methods of Making and Using the Same

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

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2. a fee set forth in 37 CFR § 1.17(p)

Docket No.: 123029-1057 (UHID 2003-031)

Patent

Dated: 4-12-06


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Attorney for Applicant

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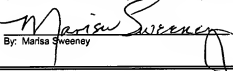
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Date of Deposit: April 12, 2006

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By: Marisa Sweeney

Substitute for 1449/PTO

(Use as many sheets as necessary)

Sheet 1 of 5

Complete If Known

Application Number	10/553,328
Filing Date	Unknown
First Named Inventor	Xiaolian Gao
Art Unit	1623
Examiner Name	
Attorney Docket Number	123029-1057 (UHID 2003-031)

U. S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

Examiner Initial	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Country or Patent Office	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Y ⁴
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Substitute for 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i> Sheet <u>2</u> of <u>5</u>	<i>Complete If Known</i>	
	Application Number	10/553,328
	Filing Date	Unknown
	First Named Inventor	Xiaolian Gao
	Art Unit	1623
	Examiner Name	
	Attorney Docket Number	123029-1057 (UHID 2003-031)

NON PATENT LITERATURE DOCUMENTS			T ¹
Examiner Initial*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	
	3.	WASSERMAN, S.R., et al. Structure and reactivity of alkylsiloxane monolayers formed by reaction of alkyltrichlorosilanes on silicon substrates. <i>Langmuir</i> , 5, (1989) 1074-1087	
	4.	BALACHANDER, N. et al. Monolayer Transformation by Nucleophilic Substitution: Applications to the Creation of New Monolayer Assemblies. <i>Langmuir</i> , 6, (1990) 1621-1627	
	5.	PETRI, D.F.S., et al. An improved method for the assembly of amino-terminated monolayers on SiO ₂ and the vapor deposition of gold layers. <i>Langmuir</i> , 15, (1999) 4520-4523	
	8.	INGALL, M.D.K., et al. Surface functionalization and imaging using monolayers and surface-grafted polymer layers. <i>J. Am. Chem. Soc.</i> , 121, (1999) 3607-3613	
	7.	KATZHENDLER, J., et al. The effect of spacer, linkage and solid support on the synthesis of oligonucleotides. <i>Tetrahedron</i> , 45, (1989) 2777-2792	
	8.	TEMSAMANI, J., et al. Sequence identity of the n -1 product of a synthetic oligonucleotide. <i>Nucleic Acids Res.</i> , 23, (1995) 1841- 1844	
	9.	FEARON, K.L., et al. Investigation of the 'n -1' impurity in phosphorothioate oligodeoxynucleotides synthesized by the solid-phase ~-cyanoethyl phosphoramidite method using stepwise sulfuration. <i>Nucleic Acids Res.</i> , 23, (1995) 2754-2761	
	10.	IYER, R.P., et al. Improved procedure for the reduction of n-I content in synthetic oligonucleotides. <i>Nucl. Nucl.</i> , 14, (1995) 1349-1357	

Examiner Signature	/Patrick Lewis/ (10/13/2009)	Date Considered	
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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Sheet 3 of 5

11.	MASKOS, U. et al. Oligonucleotide hybridization on glass supports: a novel linker for oligonucleotide synthesis and hybridization of oligonucleotides in situ. <i>Nucleic Acids Res.</i> , 20, (1992) 1679-1684	
12.	GRAY, D.E., et al. Ellipsometric and interferometric characterization of DNA probes immobilized on a combinatorial array. <i>Langmuir</i> , 13, (1997) 2833-2842	
13.	SHCHEPINOV, M.S., et al. Steric factors influencing hybridization of nucleic acids to oligonucleotide arrays. <i>Nucleic Acids Res.</i> , 25, (1997) 1155-1161	
14.	GUO, Z., et al. Direct fluorescence analysis of genetic polymorphisms by hybridization with oligonucleotide arrays on glass supports. <i>Nucleic Acids Res.</i> , 22, (1994) 5456-5465	
15.	PIRRUNG, M.C. et al. Comparison of methods for photochemical phosphoramidite-based DNA synthesis. <i>J. Org. Chem.</i> , 60, (1995) 6270-6276	
16.	PIRRUNG, M.C. and Fallon, L. Proofing of photolithographic DNA synthesis with 3',5'-dimethoxybenzoinyloxycarbonyl-protected deoxynucleoside phosphoramidites. <i>J. Org. Chem.</i> , 63, (1998) 241-246	
17.	PEASE, A.C., et al. Light-generated oligonucleotide arrays for rapid DNA sequence analysis. <i>Proc. Natl Acad. Sci. USA</i> , 91, (1994) 5022-5026	
18.	MCGALL, G.H., et al. Light-directed synthesis of high-density oligonucleotide arrays using semiconductor photoresists. <i>Proc. Natl Acad. Sci. USA</i> , 93, (1996) 13555-13560	
19.	BEIER, M. et al. Versatile derivatization of solid support media for covalent bonding on DNA-microchips. <i>Nucleic Acids Res.</i> , 27, (1999) 1970-1977	

Examiner Signature	/Patrick Lewis/ (10/13/2009)	Date Considered	
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20.	Yu, D., et al. Diethoxy N, N-diisopropylphosphoramidite as an improved capping reagent in the synthesis of oligonucleotides using phosphoramidite chemistry. <i>Tetrahedron Letters</i> 35, (1994) 8565-8568	
21.	LEPROUST, E., et al. Characterization of oligodeoxyribonucleotide synthesis on glass plates. <i>Nucleic Acids Res.</i> , 29, (2001) 2171-2180	
22.	ECKSTEIN, F. (ed.) Oligonucleotides and Analogues, A Practical Approach. IRL Press, Oxford, UK, (1991) 109-135	
23.	FIELDS, G.B. (ed.) Methods in Enzymology. Academic Press, New York, USA, 289, (2001) Academic Press, New York, USA	
24.	SEARS et al. Toward Automated Synthesis of Oligosaccharides and Glycoproteins. <i>Science</i> 291, (2001) 2344-2350, American Association for the Advancement of Science, Washington, D.C. USA	
25.	HARRIS, J.M. et al. (ed.), Poly(Ethylene Glycol) ACS Symposium Series No. 680 (1997) American Chemical Society, Washington, D.C. USA	
26.	ARAKAWA, T. et al. Mechanism of Poly(ethylene glycol) Interaction with Proteins, <i>Biochemistry</i> 24, (1985) 6756-6762, American Chemical Society, Washington, D.C., USA	
27.	ZHU, X-Y., et al. Grafting of High-Density Poly(ethylene glycol) Monolayers on Si(111), <i>Langmuir</i> 17 (2001) 7798-7803, American Chemical Society, Washington, D.C., USA	
28.	KNOLL, E. et al., Unimolecular Beacons for the Detection of DNA-Binding Proteins. <i>Anal. Chem.</i> (2004) 76, 1156-1164, American Chemical Society, Washington, D.C., USA	

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